UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

TRIPOD EXPEDITION

November-December 1966

LIST OF CORES AND DREDGE HAULS

Copied from Shipboard Logs

Depths Corrected by Matthews' Tables

R/V ARGO

Note: Samples are listed consecutively, causing some dates to be out of order.

- TRI 1Go 19 November 1966, 0639-0725 hrs.; 2°00'S, 86°02'W; depth 2509 m; core length 134 cm. Approx. top 5 cm is red clay, remainder calcareous ooze. Flat bottom, top of Galapagos Ridge.
- TRI 1PG 25 November 1966, 0837-1015 hrs.; 6°13'N, 90°50'W; depth 3626 m; no core, corer lost. Abyssal plains.
- TRI 1P Simultaneously with 1PG. Core length: Section 1 (bottom of core), 112 cm; Section 2, 120 cm; Section 3, 150 cm; Section 4, 147 cm. Core probably disturbed. Oriented core.
- TRI 2Go 23 November 1966, 1554-1640 hrs.; 0°54'N, 88°01'W; depth 2575 m; core length, lll cm. Red clay at top, followed by calcareous ooze, light brown mud, and green clay at bottom. Rolling hills, top Galapagos Ridge.
- TRI 2PG 26 November 1966, 0831-1010 hrs.; 8°53'N, 93°15'W; depth 3492 m; core length 66 cm. Greenish gray clay. Abyssal plains.
- TRI 2P Simultaneously with 2PG. Core length: Section 1 (bottom of core), 131 cm; Section 2, 149 cm; Section 3, 145 cm; Section 4, 54 cm. Gray-green clay. Oriented core.
- TRI 3Go 26 November 1966, 0005-0100 hrs.; 7°45'N, 92°15'W; depth 3436 m; core length 40 cm. Brown mud on top of light brown clay, greengray clay at bottom. Abyssal plain.
- TRI 3PG 26 November 1966, 1520-1630 hrs.; 9°22'N, 93°44'W; depth 3644 m. No core. Abyssal plains.
- TRI 3P Simultaneously with 3PG. Core length: Section 1 (bottom of core) 150 cm; Section 2, 150 cm; Section 3, 113 cm; Section 4, 150 cm. Gray-green clay.
- TRI 4Go 27 November 1966, 0220-0336 hrs.; 10°12'N, 94°26'W; depth 3847 m. Core length 136 cm. Green-gray clay and brown mud. Abyssal plains.
- TRI 4PG 27 November 1966, 1240-1430 hrs.; 11°40'N, 95°23'W; depth 4141 m. Core length 127 cm. Brown mud at top, remainder green-gray clay. Abyssal plains.
- TRI 4P Simultaneously with 4PG. Core length: Section 1 (bottom of core), 135 cm; Section 2, 150 cm; Section 3, 145 cm; Section 4, 148 cm. Green-gray clay. 1 to 2 fms. double bottom. Abyssal plains.
- TRI 5Go 28 November 1966, 0237-0348 hrs.; 12°38'N, 96° 21'W; depth 4039 m; core length 159 cm. Greenish-grey clay. Abyssal plain.
- TRI 5PG 6 December 1966, 0418-0550 hrs.; 15°38'N, 112°57'W; depth 3929 m; core length 167 cm. Dark brown clay.

- Simultaneously with 5PG. Core length: Section 1 (bottom of core), 150 cm; Section 2, 157 cm; Section 3, 150 cm; Section 4, 118 cm. In Section 2, sediment is only at levels: 0-34 cm, 73.5-103.5 cm, and 127-157 cm. In Section 3, sediment is only at levels: 0-27.5 cm, 31-50 cm, and 60-150 cm. Water pockets in remaining levels.
- TRI 6Go 4 December 1966, 1345-1453 hrs.; 14°26'N, 108°24'W; depth 3757 m; core length 183 cm. Red clay. Very rough; west of East Pacific Rise, east of Mathematicians Seamount.
- TRI 6PG 6 December 1966, 1308-1430 hrs.; 16°47'N, 113°00'W; depth 3438 m; core length 164 cm. Brown clay.
- TRI 6P Simultaneously with 6PG. Core length: Section 1 (bottom of core), 150 cm; Section 2, 116 cm; Section 3, 150 cm; Section 4, 104 cm. Hard, brown sediment. Corer penetrated approx. 30 cm above bottom of weight stand.
- TRI 7Go 5 December 1966, 1238-1343 hrs.; 14°28'N, 111°50'W; depth 3644 m; core length 103 cm. Red clay, Mn nodule on top. Very rough bottom.
- TRI 7PG 6 December 1966, 1904-2015 hrs.; 17°30'N, 113°00'W; depth 3697 m; core length 178 cm. Brown clay.
- TRI 7P Simultaneously with 7PG. Core length: Section 1 (bottom of core), 150 cm; Section 2, 94 cm, Section 3, 150 cm; Section 4, 80 cm.

 There appeared to be a major water pocket between Sections 2 and 3; some minor water pockets in core. Brown clay, lower half hard. Oriented core.
- TRI 8Go 11 December 1966, 0815-0916 hrs.; 20°50'N, 112°31'W; depth 3607 m; core length 184 cm. Top 15 cm was lost by overpenetration. Red clay. Abyssal plain between Seamounts.
- TRI 8PG 7 December 1966, 1106-1215 hrs.; 19°06'N, 112°57'W; depth 3463 m; core length 45 cm. Small hills.
- TRI 8P Simultaneously with 8PG. A few Mn nodules with red clay and white coarse material kept in plastic box. Preservation deplorable.
- TRI 9Go 16 December 1966, 1652-1803 hrs.; 20°48'N, 118°01'W; depth 3992 m; core length 166 cm. Red clay.
- TRI 9PG 7 December 1966, 2138-2315 hrs.; 20°15'N, 112°42'W; depth 3531 m; core length 168 cm. Brown clay. Orienting device defective. Abyssal hills.
- TRI 9P Simultaneously with 9PG. Core length: Section 1 (bottom of core), 150 cm; Section 2, 150 cm; Section 3, 150 cm; Section 4, 150 cm. Red clay.
- TRI 10Go 18 December 1966, 1145-1252 hrs.; 22°27'N, 119°10'W; depth 4121 m; core length 167 cm. Red clay with Mn nodules. Abyssal hills.

- TRI 11Go 18 December 1966, 1913-2023 hrs.; 23°19'N, 119°00'W; depth 4025 m; core length 162 cm. Red clay. Abyssal hills.
- TRI 12Go 19 December 1966, 1300-1415 hrs.; 25°58'N, 118°26'W; depth 4180 m; core length 135 cm. Red clay. Abyssal hills in Baja California Seamount Province.
- TRI 13Go 20 December 1966, 0312-0418 hrs.; 27°48'N, 118°08'W; depth 3692 m; core length 181 cm. Red clay. Abyssal hills.
- TRI 14Go 20 December 1966, 0852-1000 hrs.; 28°15'N, 118°04'W; depth 4112 m; core length 185 cm. Red clay. Abyssal hills.

DREDGE HAULS

- TRI 1D 10 December 1966, 0648-1100 hrs.; 20°51'N, 112°40'W; depth 2478 m; 1 small 6 cm nodule, several hook-ups possibly indicate pillow lava. Seamount "B".
- TRI 2D 11 December 1966, 0200-0416 hrs.; 20°45'N, 112°47'W; depth 1711 m. Pipe dredge: 1 burlap bag of manganese encrusted basalt. Seamount "D".
- TRI 3D 12 December 1966, 1600-1910 hrs.; 21°18'N, 112°42'W; depth 2496 m. Pipe dredge. 1 burlap bag of manganese nodules and manganese encrusted basalt. Seamount "E".
- TRI 4D 13 December 1966, 1107-1450 hrs.; 20°45'N, 114°27'W; depth 3840 m. Pipe dredge. Approx. 1 dozen small manganese nodules. Abyssal hills.
- TRI 5D 13 December 1966, 1949-2345 hrs.; 20°32'N, 114°58'W; depth 3705 m. Pipe dredge. One 55 gal. drum full of red clay and small manganese nodules for H. H. Kolm, M.I.T. Abyssal hills.
- TRI 6D 14 December 1966, 0010-0450 hrs.; 20°32'N, 114°58'W; depth 3705 m. Pipe dredge. One 55 gal. drum full of red clay and small manganese nodules for H. H. Kolm, M.I.T. Abyssal hills.
- TRI 7D 15-16 December 1966, 2337-0240 hrs.; 20°31'N, 116°39'W; depth 2046 m to 1424 m. No sample: lost dredge. Seamount "G".
 - TRI 8D 16 December 1966, 0357-0620 hrs.; 20°27'N, 116°36'W; depth 1861 m to 1490 m. Pipe dredge. One piece of weathered basalt. Seamount "G".
 - TRI 9D 17 December 1966, 2010 hrs.; 21°05'N, 119°22'W; depth 2984 m to 2607 m; chain dredge. One burlap bag of manganese encrusted basalt. Seamount "H".



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Key to Abbreviations Used in Sample Descriptions ("core logs")

G: Gravity core

P: Piston core

PG: Gravity core obtained in conjuction with a piston core, and bearing the same sample number. This is also known as a "trip gravity" core since in this instance a gravity corer is used to trip the arm of the piston corer.

Note:

In some core logs (e.g. Monsoon) it will be noted that there is sometimes a PG core with no accompanying P core (or vice versa). This is a result of no P sample having been obtained; therefore, even the attempt was ignored when the log was compiled. (Obviously, however, there was an attempt or there would be no PG.)

V: Heat probe core, short and of small diameter (c. 1"), developed by R. von Herzen. Occasionally regular gravity cores are used instead.

GV: AMPHITRITE Expedition ONLY: Gravity cores taken for a specific person and purpose.

Note:

Such "special request" cores are frequently taken on SIO cruises; but, with the above exception, are not usually designated differently than other samples. Frequently, also, such cores are used in their entirety by the person for whom they were taken and are no longer in the SIO collection, even though they may appear in the log.

C: Very small cores obtained by corers attached to the frame of a camera.

T: Triple corer samples, some are very small, others are regular gravity cores.

Grab: Designated as such (e.g., MSN 135 grab).

S: Snapper: The proper term for "grab". May also be spelled out.

D: Dredge samples. Also used to designate subaerial samples.

H: Hydrographic PBS (Phleger Bottom Sampler). See Downwind, Horizon, DWHHI.

Abbreviations of ship names:

A: R/V Argo (e.g., LSDA)

H: R/V Horizon (e.g., LSDH, DWH)

B: R/V Spencer F. Baird (e.g., DWB)
HMS: R/V Hugh M. Smith (e.g., FAN, HMS)

S: R/V Stranger

Note: In the LUSIAD-ARGO (LSDA) core log will also be found SCS: South China Sea.

Use of lower case letters and prime ('): Used to indicate that two (or more) attempts were made to obtain a sample; e.g., 101 G (first attempt), 101 Ga (second attempt); or 101 Ga (first attempt), 101 Gb (second attempt). Occasionally, as in Chubasco Roman-numeraled samples, a prime mark (') has been used for this purpose, e.g., CHUB Vg, V'g. (Note that this log also uses lower case for gravity and piston core designations).

Occasionally no letter designation is used if all cores of an expedition were gravity cores.